

Sub 3 >
A2
5. (Amended) The tissue culture according to claim 4, cells or protoplasts of the tissue culture being from a tissue source selected from the group consisting of leaves, pollen, embryos, roots, root tips, anthers, silks, flowers, kernels, ears, cobs, husks, and stalks.

A3
6. (Amended) A maize plant regenerated from the tissue culture of claim 4.

A3
8. (Amended) The method of claim 7 wherein the inbred maize plant produced by growing the seed of inbred line PH54H, is the female or male parent.

Sub 4 >
C4
H4
5. (Amended) A maize plant, or parts thereof, wherein at least one ancestor of said maize plant is the maize plant of claim 2, said maize plant expressing a combination of at least two traits which are not significantly different from PH54H when determined at a 5% significance level and when grown in the same environmental conditions, said traits selected from the group consisting of: a maturity of 95 based on the Comparative Relative Maturity Rating System for harvest moisture of grain, resistance to root lodging, pollen shed, yield, grain dry down, brittle stalk resistance, plant height, and adaptability to the Northcentral region of the United States.

15. (Amended) A method for developing a maize plant in a maize plant breeding program comprising: obtaining the maize plant, or its parts, of claim 2; and employing said plant or parts as a source of breeding material using plant breeding techniques.

16. (Amended) The method of claim 15 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

Sub 5 >
C4
H5
22. (Amended) The maize plant of claim 21, wherein said plant has been manipulated to be male sterile.

A4
sub C7

24. (Amended) The tissue culture according to claim 23, cells or protoplasts of the tissue culture being from a tissue source selected from the group consisting of leaves, pollen, embryos, roots, root tips, anthers, silks, flowers, kernels, ears, cobs, husks, and stalks.

A7

25. (Amended) A maize plant regenerated from the tissue culture of claim 23.

A7

27. (Amended) The method of claim 26 wherein the plant having all the physiological and morphological characteristics of inbred line PH54H is the female or male parent.

sub C9

33. (Amended) A maize plant, or parts thereof, wherein at least one ancestor of said maize plant is the maize plant of claim 21, said maize plant expressing a combination of at least two traits which are not significantly different from PH54H when determined at a 5% significance level and when grown in the same environmental conditions, said traits selected from the group consisting of: a maturity of 95 based on the Comparative Relative Maturity Rating System for harvest moisture of grain, resistance to root lodging, pollen shed, yield, grain dry down, brittle stalk resistance, plant height, and adaptability to the Northcentral region of the United States.

A8

34. (Amended) A method for developing a maize plant in a maize plant breeding program comprising: obtaining the maize plant, or its parts, of claim 21; and employing said plant or parts as a source of breeding material using plant breeding techniques.

35. (Amended) The method of claim 34 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

sub J9

41. (Amended) A PH54H-derived maize plant, or parts thereof, produced by the method of claim 40, said PH54H-derived maize plant expressing a combination of at least two traits which are not significantly different from PH54H when determined at a 5% significance level and when grown in the same environmental conditions, said traits selected from the group consisting of: a maturity of 95 based on the Comparative Relative Maturity Rating System for harvest moisture of grain, resistance to root lodging,

A cont'd
~~pollen shed, yield, grain dry down, brittle stalk resistance, plant height, and adaptability to the Northcentral region of the United States.~~

A 10 Sub C 14
43. (Amended) The further PH54H-derived maize plant, or parts thereof, produced by the method of claim 42.

Sub B 1
45 (Amended) A PH54H-derived maize plant, or parts thereof, produced by the method of claim 44, said PH54H-derived maize plant expressing a combination of at least two traits which are not significantly different from PH54H when determined at a 5% significance level and when grown in the same environmental conditions, said traits selected from the group consisting of: a maturity of 95 based on the Comparative Relative Maturity Rating System for harvest moisture of grain, resistance to root lodging, pollen shed, yield, grain dry down, brittle stalk resistance, plant height, and adaptability to the Northcentral region of the United States.

A 11
46. (Amended) A further PH54H-derived maize plant, or parts thereof, of claim 43, wherein said further PH54H-derived maize plant or parts thereof, express a combination of at least two traits which are not significantly different from PH54H when determined at a 5% significance level and when grown in the same environmental conditions, said traits selected from the group consisting of: a maturity of 95 based on the Comparative Relative Maturity Rating System for harvest moisture of grain, resistance to root lodging, pollen shed, yield, grain dry down, brittle stalk resistance, plant height, and adaptability to the Northcentral region of the United States.

Please add new claims 50 and 51

A 12
50. (New) The seed of claim 1 wherein said seed further comprises genetic or cytoplasmic male sterility.

51. (New) The maize plant of claim 21, wherein said plant further comprises genetic or cytoplasmic male sterility.